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10/618,313	07/10/2003	Christopher J. Barbazette	34741-926	4770

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O'MELVENY & MYERS, LLP
275 BATTERY STREET
SUITE 2600
SAN FRANCISCO, CA 94111-3305

EXAMINER

CHANG, SUNRAY

ART UNIT PAPER NUMBER

2121

DATE MAILED: 01/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/618,313

Applicant(s)

BARBAZETTE ET AL.

Examiner

Sunray Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-20 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 14 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in responsive to the paper filed on November 14th, 2005.

Claims 1 – 20 are presented for examination.

Claims 1 – 20 are rejected.

A new replacement drawing 1/6 has been submitted.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1 – 8, 10 – 12, 14 – 18 and 20 are rejected** under 35 U.S.C. 102(e) as being anticipated by Stuart Perry (U.S. P.G. Pub. No. 2003/0220768, and referred to as **Perry** hereinafter).

Regarding independent claim 1, Perry teaches,

A method for monitoring [diagnostics system] messages and failure codes generated by a front end component [operative to collect and process data from the tools] in a processing tool

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controlled by a tool controller [tool controller, 0012], whereby the front end component is coupled with a front end component controller [tool computer, Fig. 5], [0011 – 0014, Fig. 3] the method comprising the steps of:

- (a) receiving messages and failure codes [obtaining data, 0014] generated by the front end component controller [tool computer, Fig. 5] through a data acquisition device [tool Gateway server] that is coupled with the front end controller [tool console server] separate from the tool controller [eCentre Application Server]; [Fig. 4; 0072]
- (b) filtering the messages and failure codes [filtering, 0014] received by the data acquisition device [tool Gateway server] in said step (a) according to user defined criteria [custom business rules, 0013];
- (c) storing the messages and failure codes filtered in said step (b) in a database [storing the averaged sample, 0014]; and
- (d) presenting the messages and failure codes filtered [transferring, 0015] in said step (b) over a network [Fig. 4].

Regarding dependent claims 2 – 6, 16 and 17,

said component controllers are selected from a group consisting of

- (i) a load port assembly controller, (ii) an auto ID controller, (iii) a wafer handling robot controller, (iv) a pre-aligner controller, (v) a minienvironment controller, and (vi) an AMHS controller. [automated manufacturing tools, 0012; tool computer, Fig. 5 and 0059; see also tools in Fig. 3]

Examiner further explains, all cited controllers, for example, load port assembly controller or a minienvironment controller, are processing tool controllers [specification, 0035], each controller, individually, has been given very little patent weight. **Perry** teaches automated manufacturing tools [0012] and tool computer, [Fig. 5 and 0059], also a plurality of tools [Fig. 3].

Regarding dependent claim 7,

The method according to claim 1, wherein

- receiving the messages and failure codes in said step (a) comprises receiving the messages and failure codes in real time. [obtaining real-time equipment data, 0101; see also 0057, 0082 and 0091]

Regarding dependent claim 8,

The method according to claim 1, wherein

- presenting the messages and failure codes in said step (d) comprises presenting the messages and failure codes [view graphs, 0103] in real time [0101 – 0102, 0044].

Regarding dependent claim 10,

The method according to claim 1, wherein presenting the messages and failure codes over a network in said step (d) comprises:

- (i) exporting messages and failure codes stored in said step (c) [transferring data to OEM from FAB, 0015] and

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(ii) generating a report [reporting tool, 0122] that organizes the exported messages and failure codes exported in said step (d)(i) into a user readable format [uncompressed, 0122]. [see also 0016 – 0018 and 0079]

Regarding dependent claim 11,

The method according to claim 10, wherein generating a report in said step (d)(ii) comprises:

(i) defining which messages and failure codes stored in the database in said step (c) are relevant, keyed relational database, 0019]

(ii) defining a start date and a start time for the report, [activities is logged by date, time, activities, 0088]

(iii) defining an end date and an end time for the report, [activities is logged by date, time, activities, 0088]

(iv) gathering the relevant messages and failure codes from the database that are between the start date and time defined in said step (ii) and the end date and time defined in said step (iii), [average intervals, holding period, minimum, maximum, number of times, exact value and time stamp, 0125] and

(iv) presenting the messages and failure codes gathered in said step (iv) in a readable format. [reporting tool, uncompressed, 0122] see also [0123 – 0126]

Regarding dependent claim 12,

The method according to claim 1, wherein receiving the messages in said step (a) comprises

- receiving messages selected from a group consisting of

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(i) event messages, (ii) control messages, and (iii) configuration messages. [system-wide events, 0088; the software also logs every action that occurs, 0083]

Regarding dependent claim 14,

The method according to claim 1, wherein filtering the messages in said step (b) includes

(i) storing [storing, 0014] the messages and failure codes [obtaining data, 0014] temporarily in a local memory,

(ii) selecting which messages and failure codes temporarily stored in the local memory will be stored the database, [obtaining a representative sample, averaging the sample, 0014] and

(iii) forwarding the selected messages to the database. [storing the averaged sample, 0014]

Regarding independent claims 15 and 20,

- A data collection and diagnostic system, comprising: [0011, 0012]
- a processing tool [FAB, 0012] having a plurality of front end components [at least one automated manufacturing tool, 0012], each one of said plurality of front end components electrically coupled with a component controller [tool computer, Fig. 5, 0059] and generating messages and alarm signals relating to the operation of said front end component [collect and process data from the tool, 0013; 0059];
- a tool controller [centre server, Fig. 3, 0047] electrically coupled to each one of said component controllers [tool computer, Fig. 5, 0059];

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- a data acquisition device [tool Gateway server, 0062, Fig. 3] electrically coupled to each one of said component controllers [tool computer, Fig. 3 & 5, 0059] separate from said tool controller [Fig. 3, Fig. 4; 0072],
- said data acquisition device [tool Gateway server, 0062, Fig. 3] adapted to receive of said messages and alarm signals generated by each one of said component controllers [operative to collect and process data from the tools, 0011 – 0014], [0062, Abstract] including:
 - a processor [server];
 - a memory for storing said_ messages and alarm signals [collect, 0013; 0062]; and
 - a network interface; [firewall, Fig. 3] and
 - a remote computer electrically coupled to said tool controller and said network interface of said data acquisition device. [Fig. 3, Fig. 4; 0072]

Regarding independent claim 18,

The system according to claim 15, wherein

- said remote computer is electrically coupled to said network interface through a local area network. [Fig. 3, Fig. 4; 0072]

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3 **Claims 9, 13 and 19 are rejected** under 35 U.S.C. 103(a) as being unpatentable over **Perry** and in view of Chang-Meng B. Hsiung (U.S. P.G. Pub. No. 2003/0109951 and referred to as **Hsiung** hereinafter).

(**Perry** as set forth above generally discloses the basic inventions.)

Regarding dependent claim 9,

Perry teaches presenting the messages and failure codes over a network in said step (d) includes providing access to the network. [java technology based application, webSphere, 0073 and Fig. 7 – 14; data window, 0133 and Fig. 9]

Perry does not teach Internet browser.

Hsiung teaches Internet browser [browser software, 0040, 0203 and 0218], for the purpose of acquiring data over the Internet [0040].

It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of **Perry** to include "Internet browser" for the purpose of acquiring data over the Internet.

Regarding dependent claims 13 and 19,

Perry teaches remote computer is electrically coupled to said network interface. [Fig. 3, Fig. 4; 0072]

Perry does not teach a wireless network.

Hsiung teaches a wireless network [wireless communication, 0028 and 0031; wireless LAN, 0230] for the purpose of enabling the mobile consulting service [0229].

It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of **Perry** to include "a wireless network" for the purpose of enabling the mobile consulting service.

Response to Amendment

Claim Objections

4. Applicants delete or amend the objected claims. The examiner withdraws forth claim objections.

Claim Rejections - 35 USC § 102

5. Applicants' argument regarding "Perry does not disclose a data acquisition device, separate from the tool controller, for collecting information generated by each front component controller" is disagreed with. Perry discloses a data acquisition device [Tool Gateway Server; 0011 – 0014 and Fig. 3 & 4; see also 0072] separate from the tool controller [eCentre Application Server, Fig. 3 & 4; remote diagnostics system, Abstract; see also 0072], for collecting information generated by each front component controller [Tool Console Server, Fig. 3 & 4; Abstract; see also 0011 – 0014 and 0072].

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunray Chang whose telephone number is (571) 272-3682. The examiner can normally be reached on M-F 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on (571) 272-3687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-746-3506.

Sunray Chang
Patent Examiner
Group Art Unit 2121
Technology Center 2100
U.S. Patent and Trademark Office

January 11, 2006



Anthony Knight
Supervisory Patent Examiner
Group 3600